| L Number | Hits | Search Text | DB | Time stamp |
|---|---|---|---|---|
| - | 12 | 123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/12/06 16:34 |
| - | 3 | 123/568.14.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/12/05 15:54 |
| - | 41 | 123/568.21.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed) not (123/568.14.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed)) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/12/05 16:23 |
| - | 2 | 123/681.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed) not (123/568.14.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed)) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/12/05 16:46 |

| - | | 1 | 123/301.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed) not (123/568.14.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed)) not (123/681.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed) not (123/568.14.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed))) not (123/568.21.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed) not (123/568.14.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed))) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/12/05 16:49 |

| - | | 7 | 123/435.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed) not (123/568.14.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed)) not (123/681.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed) not (123/568.14.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed))) not (123/568.21.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed) not (123/568.14.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed))) not (123/301.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed) not (123/568.14.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed)) not (123/681.ccls. and (estimat$4 or calculat$4 or | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/12/05 17:04 |

| - | 80 | 123/90.15.ccls. and internal near2 (EGR or exhaust near2 gas near2 recirculation) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB | 2002/12/05 17:03 |
|---|----|---|---|---|

| - | | 2 | 123/90.17.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed) not (123/568.14.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed)) not (123/681.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed) not (123/568.14.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed))) not (123/568.21.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed) not (123/568.14.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed))) not (123/301.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed) not (123/568.14.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed)) not (123/681.ccls. and (estimat$4 or calculat$4 or | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/12/05 17:08 |

| - | | 28 | 60/285.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed) not (123/568.14.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed)) not (123/681.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed) not (123/568.14.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed))) not (123/568.21.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed) not (123/568.14.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed))) not (123/301.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed) not (123/568.14.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed)) not (123/681.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/12/05 17:10 |

| - | | 2 | 60/285.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same (exhaust or intake) near2 valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed) not (123/568.14.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed)) not (123/681.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed) not (123/568.14.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed))) not (123/568.21.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed) not (123/568.14.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed))) not (123/301.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed) not (123/568.14.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (EGR or exhaust near2 gas near2 recirculation) same valve near5 (clos$4 or open$4) and engine near2 speed)) not (123/681.ccls. and (estimat$4 or calculat$4 or | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/12/05 17:11 |

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| - | 15 | "5635634" and engine near2 speed | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/12/05 18:02 |
|---|---|---|---|---|
| - | 13 | "5635634" and engine near2 speed and (exhaust near2 valv$2 or intake near2 valv$2) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/12/05 18:03 |
| - | 15 | "3714932" and engine near2 speed | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/12/06 14:28 |
| - | 8 | "3714932" and engine near2 speed and (EGR or exhaust near2 gas near2 recirculation) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/12/06 14:30 |
| - | 11 | "3714932" and (EGR or exhaust near2 gas near2 recirculation) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/12/06 14:30 |
| - | 10 | 123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (internal or inner) near3 (EGR or exhaust near2 gas near2 recirculation) and valv$2 and engine near2 speed | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/12/06 17:19 |
| - | 13 | 60/285.ccls. and (estimat$4 or calculat$4 or predict$4) same (internal or inner) near3 (EGR or exhaust near2 gas near2 recirculation) and valv$2 and engine near2 speed | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/12/06 16:47 |
| - | 10 | "5494008" and exhaust near2 valv$2 | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/12/06 17:09 |
| - | 10 | "5494008" and exhaust near2 valv$2 near5 clos$4 | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/12/08 15:37 |
| - | 14 | 123/568.21.ccls. and (estimat$4 or calculat$4 or predict$4) same (internal or inner) near3 (EGR or exhaust near2 gas near2 recirculation) and valv$2 and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (internal or inner) near3 (EGR or exhaust near2 gas near2 recirculation) and valv$2 and engine near2 speed) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/12/06 17:44 |
| - | 2 | 123/435.ccls. and (estimat$4 or calculat$4 or predict$4) same (internal or inner) near3 (EGR or exhaust near2 gas near2 recirculation) and valv$2 and engine near2 speed not (123/90.15.ccls. and (estimat$4 or calculat$4 or predict$4) same (internal or inner) near3 (EGR or exhaust near2 gas near2 recirculation) and valv$2 and engine near2 speed) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/12/06 17:46 |
| - | 0 | "5494008" and tope near2 dead near2 center | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/12/08 15:37 |

| | | | | |
|---|---|---|---|---|
| – | 4 | "5494008" and (top near2 dead near2 center or TDC) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/12/08 15:44 |
| – | 7 | "5494008" and (EGR or exhaust near2 gas near2 recirculation) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/12/08 15:58 |
| – | 11 | "5494008" and (ignition or spark) | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/12/08 16:27 |
| – | 13 | "5494008" and air | USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB | 2002/12/08 16:27 |